

A NEW SPECIES OF THE GENUS *ANALGES* FROM SICHUAN, CHINA (ASTIGMATA, ANALGIDAE)

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Abstract A new feather mites species *Analges* (*Analgopsis*) *roseate* sp. nov. was described with specimens collected from *Anthus roseatus* (Passeriformes, Motacillidae) in Sichuan Province of China. The type specimens of the new species are deposited in the Institute of Entomology, Southwest University, Chongqing, China.

Key words Astigmata, Analgidae, *Analges*, new species, China.

1 Introduction

The genus *Analges* was proposed by Nitzsch in 1818 (Gaud & Atyeo, 1996) with the type-species *Analges passerinus* (Linnaeus, 1758). Currently, there are about 70 species in this genus. The genus was characterized by following characters: there are one pair of internal vertical setae (*vi*); the dorsal setae *c* 1 and *h* 1 are absent; setae *d* 1 and *e* 1 are short; setae *d* 2, *d* 2', *e* 2, *f* 2, *h* 2 and *h* 3 are slightly longer and setae *c* 2 have different location in male and female; epimerites I are free in male (Y-shaped) and fused in female; femur I with basal apophysis, short and truly retrograde; male tarsus III are terminated by a very strong spine; ambulacra III are more or less atrophied; epigynum of females not strongly arched. *Analges* is one of the most complicate genera in taxonomic sense. In the current taxonomic concept, it includes three subgenera - *Analges*, *Analgopsis* and *Plesialges*. The subgenus *Plesialges*, at the present includes only one single species from *Pomatopus superclivus* in Australia. The subgenera *Analges* and *Analgopsis* can be easily differentiated by male. Males of subgenus *Analges* have a cylindric tarsus III and seta *w* sits simply on the segments. In male of the subgenus *Analgopsis*, tarsus III have medial finger-like extension and seta *w* sits on the apex of this extension. The new feather mites species *Analges roseate* sp. nov. is referred to the subgenus *Analgopsis*.

2 Material and Methods

The material examined in the present study was collected from the *Anthus roseatus* (Passeriformes, Motacillidae). Mites were removed from birds with a needle under stereoscopic microscope and preserved in 96% ethanol. Specimens were mounted in polyvinyl lactophenol medium and observed under an Olympus BX51 light microscope with differential interference

contrast (DIC) illumination. The terminology of idiosoma and chaetotaxy follows that of Gaud and Atyeo (1996). Holotype (male) and paratypes are deposited in the Institute of Entomology, Southwest University, Chongqing, China.

3 Taxonomy

Family Analgidae Trouessart & Megnin, 1884

Genus *Analges* Nitzsch, 1818

Subgenus *Analgopsis* Trouessart, 1919

Analges (*Analgopsis*) *roseate* sp. nov. (Figs 1–13)

Holotype male; paratypes: 10 males and 1 female, from *Anthus roseatus* Blyth 1847. Kangding City (30°16'N, 102°17'E), Sichuan Province, China, 16 Aug. 2008, coll. TANG Yi.

Description. Male (Figs 1–7). (holotype, range for 10 paratypes). Idiosoma length 524 (404–524), width 339 (247–339). Propodosoma: shaped as quadrangle, lateral margins with apodemes as triangle; propodosoma length 99 (78–99), width 102 (88–102); distances between scapular setae: *se*: *se* 88 (67–88); seta *si* always much longer than external scapulars (*se*), 182 (110–182) long; one vertical seta (*vi*) present; setae *c* 2 456 (432–502) long, close to the edge of the scapular shield; the margins of humeral shield encompassing bases of setae *cp*; hysteronotal shield length 245 (209–251), width 151 (108–166), anterior margin concave; setae *d* 2 and *e* 2 long and near to meson. Opisthosoma without bilobation or lobes. Epimerites I fused into a Y-shaped, heavily sclerotized same as epimerites IV, and segment of epimerites II sclerotized; genital organ set on epimerites IV a, epiandrium bow-shaped. Adanal shield irregular quadrilateral shaped, length 148 (99–148), width 102 (71–102), adanal discs rounded; tarsus III with finger-like extension and seta *w* on the extension. Femur III axial-mesal with pronounced

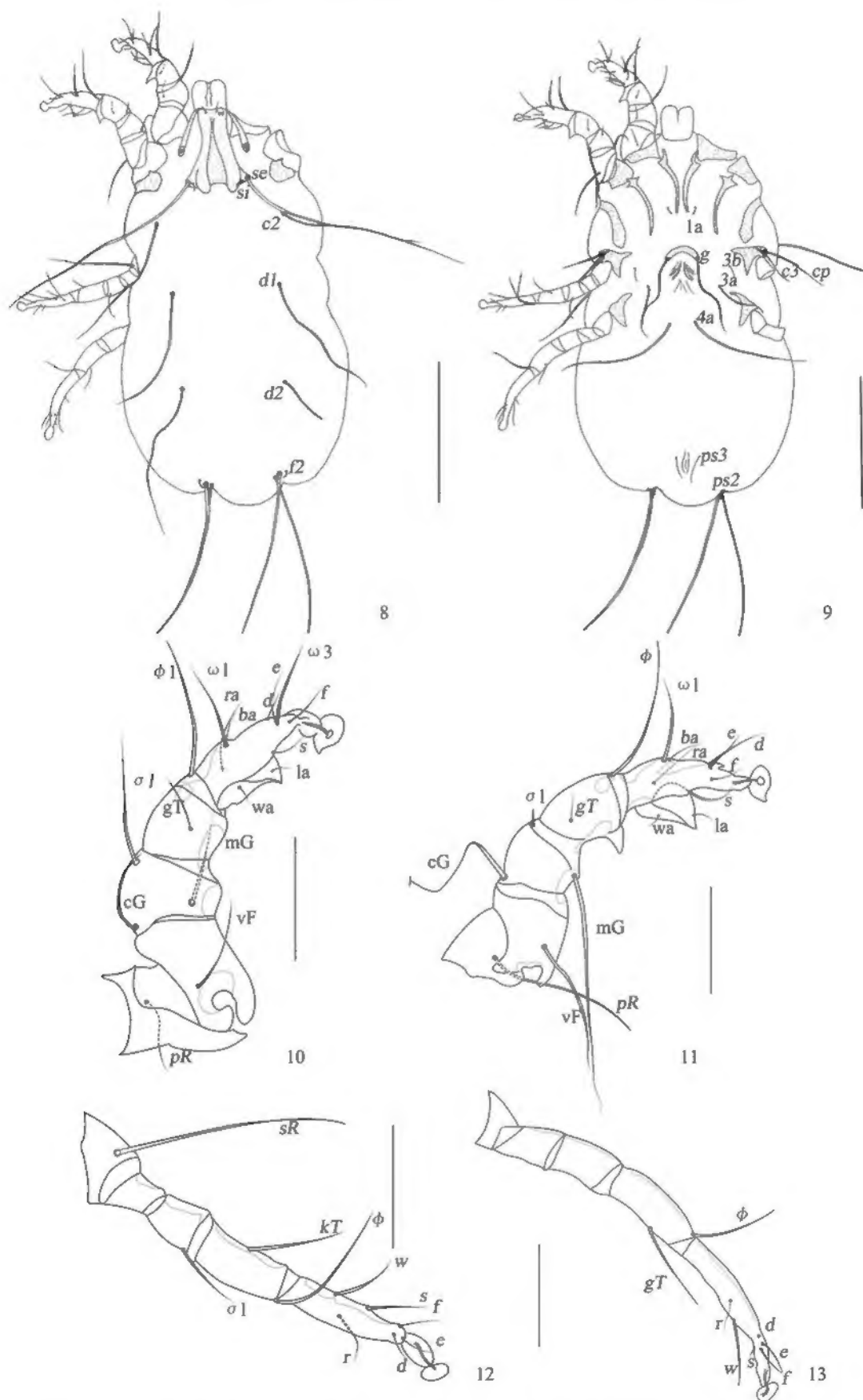
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Figs 1-7. *Agnalgex (Analgopsis) roseate* sp. nov., male. 1. Dorsal view. 2. Ventral view. 3. Ventral view of opisthosoma. 4. Leg I. 5. Leg II. 6. Leg III. 7. Leg IV. Scale bars: 1-2 = 200 μm, 3-7 = 100 μm.



Figs 8 - 13. *Agnalgus (Analgopsis) roseate* sp. nov., female. 8. Dorsal view. 9. Ventral view. 10. Leg I. 11. Leg II. 12. Leg III. 13. Leg IV. Scale bars: 8 - 9 = 200 μ m, 10 - 13 = 50 μ m.

prominence; distances between setae: $d1: d2$ 66 (45–78), $e1: e2$ 165 (60–72), $d2: e1$ 181 (120–181), $c2: d2$ 134 (124–134), $g: g2$ 28 (20–28), $ps3: ps2$ 27 (24–27), $g: ps3$ 21 (19–21).

Female (Figs 8–13). Gnathosoma shaped as in males, length 96, width 85; length of idiosoma 509, width 270. One pair of vi ; distance between scapular sc 74; $c2$, $d2$, $e2$ very long. Epimerites I free; coxal fields III and IV with sclerotized shield and epimerites triangle-shaped. Epigynum relatively stout. Distances between setae: $d2: e1$ 127, $c2: d2$ 98, $d2: e2$ 134, $h3: h2$ 95.

The new species is very similar to *A. anthi* (Mironov, 1985) but it is distinguished from *A. anthi*

by long prominence of femur III, and adanal shield with sharply angles.

Etymology. The specific epithet derives from the specific name of the host *roseatus*.

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中国四川羽螨属一新种记述 (无气门亚目, 羽螨总科)

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摘 要 描述了羽螨科 1 新种, 粉红胸鸚羽螨 *Analges roseate* sp. nov.。新种主要鉴别特征为前背板不规则四边形, 在 se 毛着生处向侧边伸出, 前板后缘靠近 se 毛着生位置有对称的三角形突起; si 毛为巨毛; 有 1 对内顶毛; 肩板退化, $c2$ 毛着生在接近脾板的体侧边缘; 肛上孔小; 没有尾叶; 亚基节内突 I Y 形, 基节 III 和基节 IV 区域完全强骨化, 基节 II 区域部分骨

化; 肛板不规则四边形; 肛吸盘圆形。

粉红胸鸚羽螨, 新种 *Analges roseate* sp. nov. (图 1–13)

正模 ♂, 四川康定, 2008-07-01, 唐毅采。副模: 10 ♂♂, 1 ♀, 同正模。

词源: 新种种名源自宿主粉红胸鸚 *Anthus roseatus* 的种名。

关键词 无气门亚目, 羽螨科, 羽螨属, 新种, 中国。

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